Amendments to the Specification

Please amend the specification as follows.

Amend the paragraph beginning at line 30 of page 5 as follows.

Figure 7 shows a graph showing percentage viability of breast cancer cells after 65 h treatment with five different EphB4 antibodies: (1) a EphB4 polyclonal antibody (Swiss) directed to amino acid residues 825 to 991 of the carboxy terminus of mouse EphB4 (gift from Dr Andrew Ziemiecki, University of Bern), (2) a polyclonal N-terminal EphB4 antibody (N -19 Santa Cruz Biotechnology) directed to the N-terminal first 19 amino acids of the EphB4 amino acid sequence which is likely to be amino acids residues 16 to 34 of the ~~mature~~ precursor EphB4 (SEQ ID NO:1), (3) a polyclonal EphB4 C-terminal antibody (C-16 Santa Cruz Biotechnology) directed to the carboxy-terminal corresponding to tyrosine kinase domain consisting of amino acid residues 615 to 874 of EphB4 (SEQ ID NO:1), (4) a EphB4 polyclonal antibody (H-200 -Santa Cruz Biotechnology) specifically directed to the extracellular domain amino residues 201 to 400 of EphB4 (SEQ ID NO:1) and (5) EphB4 polyclonal antibody (H-200 (old) -Santa Cruz Biotechnology-Lot number B141 batch) specifically directed to the extracellular domain amino residues 201 to 400 of EphB4 (SEQ ID NO:1). Cells were treated with 1/100 dilution of stock antibody (200 μg/ml), then stained with trypan blue (stains dead cells). Ratios of unstained (viable) to stained (unviable) were calculated for four different aliquots of each treatment. Control - no antibody added. CLM - complement limited medium. FCS - 10% Fetal calf serum added to medium. Complement does not play a role in the cell death effect of the EphB4 polyclonal antibody (H-200 -Santa Cruz

Biotechnology) specifically directed to the extracellular domain amino residues 201 to 400 of EphB4 (SEQ ID NO:1). This is demonstrated by the comparison of percentage viability after antibody addition to cells grown in medium with normal protein activity (FCS experiment) with cells grown in medium in which complement proteins were inactivated by heating to 55°C for 30 mins (CLM Experiment).

Amend the second full paragraph on page 7 as follows:

Figure 11 shows [[a]] the sequences of the six overlapping peptides [shown as SEQ ID NO:2 ~~NO: 2~~ (Peptide 1) to SEQ ID NO:7 (Peptide 6)] designed to span the first 125 amino acids of the target EphB4 sequence (shown in bold). The numbers refer to the position of the amino acids in the ~~mature~~ precursor EphB4 protein (SEQ ID NO:1 shown in Figure 18).

Amend the last paragraph on page 7 as follows:

Figure 15 shows an increase in the volume ~~concentration~~ of Peptide 1 (SEQ ID NO:2) or Peptide 2 (SEQ ID NO:3) (to 10 μl) was able to fully rescue cells from the EphB4 polyclonal antibody (H-200 -Santa Cruz Biotechnology) specifically directed to the extracellular domain amino residues 201 to 400 of EphB4 (SEQ ID NO:1) mediated cell death and was equal in effect to a combination of Peptides 1 and 2 (5 μl each).

Amend the first full paragraph on page 8 as follows:

Figure 16 shows [[a]] the sequences of the two overlapping peptides [shown as SEQ ID NO:2 (Peptide 1) and SEQ ID NO:3 (Peptide 2)] that were able to block the

function of the EphB4 polyclonal antibody (H-200 -Santa Cruz Biotechnology) specifically directed to the extracellular domain amino residues 201 to 400 of EphB4 (SEQ ID NO : 1) on cells in culture and sequences of three peptides [shown as SEQ ID NO:8 (Peptide 7) to SEQ ID NO:10 (Peptide 9)] designed about the core sequence GSCVV for further narrowing of the reactive sequence. The numbers refer to the position of the amino acids in the ~~mature~~ precursor EphB4 protein (sequence shown in bold font).

Amend the third full paragraph on page 8 as follows:

Figure 18 shows the amino acid sequence of SEQ ID NO:1. SEQ ID NO:1 is the amino acid sequence of ~~mature~~ precursor *Homo sapiens* Ephrin type-B receptor 4 (EphB4).

Amend the first paragraph (that is at lines 1-7) on page 9 as follows:

The placements of these domains relative to the EphB4 amino acid sequence is based on information taken from the most recent report from NCBI Accession number NP_004435. The N-19 Antibody maps to the N-terminal first 19 amino acids of the sequence which is likely to be amino acids residues 16 to 34 of the ~~mature~~ precursor EphB4 (SEQ ID NO:1). The C-16 antibody is directed to the tyrosine kinase domain. The H-200 antibody is specifically directed to residues 201 to 400 of EphB4 (SEQ ID NO:1) in the extracellular domain spanning the cysteine rich region and the ~~fibronection~~ fibronectin domain.

Amend the second paragraph (appearing at lines 8-13) on page 9 as follows:

Figure 20 shows a sequence of a Peptide 11 (SEQ ID NO:12 ~~NO: 12~~) designed to include the proposed epitope sequence and a Peptide 10 (SEQ ID NO:11) in which the amino acid Aspartate (D) which carries a charge in this wild-type sequence is substituted with an uncharged amino acid with a similar side chain structure Asparagine (N). The numbers and the sequence in bold font refer to the position of the amino acids in the ~~mature~~ precursor EphB4 protein.

Amend the first full paragraph on page 29 as follows:

Polyclonal antibodies specific for EphB4 have been developed and are available commercially, for testing of these antibodies in *in vitro* and *in vivo* systems. Figure 7 shows results of the percentage viability of breast cancer cells after treatment with five EphB4 antibodies as detailed below:

(1) a EphB4 polyclonal antibody (**Swiss**) directed to amino acid residues 825 to 991 of the carboxy terminus of mouse EphB4;

(2) a polyclonal N-terminal EphB4 antibody (**N-19** Santa Cruz Biotechnology) directed to the N-terminal first 19 amino acids of the EphB4 amino acid sequence which is likely to be amino acids residues 16 to 34 of the ~~mature~~ precursor EphB4 (SEQ ID NO:1);

(3) a polyclonal EphB4 C-terminal antibody (**C-16** Santa Cruz Biotechnology) directed to the carboxy-terminal corresponding to tyrosine kinase domain consisting of amino acid residues 615 to 874 of EphB4 (SEQ ID NO:1);

(4) a EphB4 polyclonal antibody (**H-200**-Santa Cruz Biotechnology) specifically directed to the extracellular domain amino residues 201 to 400 of EphB4 (SEQ ID NO:1);

(5) a EphB4 polyclonal antibody (**H-200 (old)** -Santa Cruz Biotechnology -Lot number B141 batch) specifically directed to the extracellular domain amino residues 201 to 400 of EphB4 (SEQ ID NO:1).

Amend the first full paragraph on page 33 as follows:

Three new ~~peptide~~ peptides (Peptides 7 to 9) of different lengths that span the GSCVV (SEQ ID ~~nNO:13~~ NO:13) core epitope sequence were made commercially based on specific amino acid residues of EphB4 protein (SEQ ID NO:1) as indicated in Figure 16. The blocking peptides have the following amino acid sequence:

Peptide 7	SEQ ID NO:8[[:]]	AGSCVVDA
Peptide 8	SEQ ID NO:9	VAGSCVVDAV
Peptide 9	SEQ ID NO:10	LVVPVAGSCVVDAVPA.